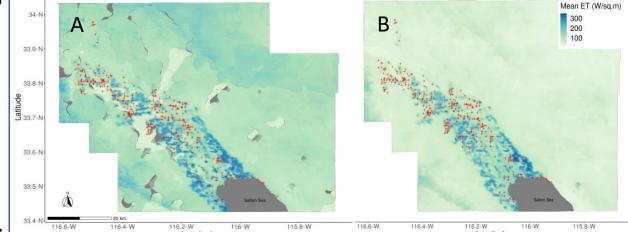


DeFelice-Environmetally informed West Nile virus forecasts

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- West Nile virus transmission is driven by an enzootic cycle between mosquito vectors and bird hosts
- Identifying the key environmental conditions that facilitate and accelerate this cycle can be used to inform effective vector control
- Statistical models using GRIDMET data, 4km resolution, show dry winter followed by warm spring are associated with an increase in mosquito infection rates
- ECOSTRESS has potential to identify hydrologically rich areas where mosquitoes and birds interact during a warm spring following a dry winter



Mean ET (W/m²) as measured by ECOSTRESS in the Coachella Valley, CA during the early season (Figure A: March - May) and late season (Figure B: June - Aug) with trap locations (red x) for 2019.







